

CLAIMS

1. A spinal osteosynthesis system comprising at least one pedicular screw (1) with a head (5), a lug (2), first means (10) for fastening the first end (4) of the lug (2) to the head (5) of the pedicular screw, a plate (6) and second means (20) for
 5 fixing the plate (6) to the second end (7) of the lug (2), characterized by the fact that first means (10) for fastening the first end (4) of the lug onto the pedicular screw head (5) comprises:

- a first portion (11) of hemispherical shape secured to the head (5) of the pedicular screw (1);

- a second portion (12) of hemispherical shape secured to the first end (4) of the lug (2), this second hemispherical portion (12) being complementary to the first hemispherical portion (11); and

- fastener means (13) for fastening together the first and second hemispherical portions (11, 12) when they cooperate one in the other with a
 15 common first center of curvature (14), and

by the fact that the second fastener means (20) for fastening the plate (6) onto the second end (7) of the lug (2) comprise:

- a third portion (23) of hemispherical shape secured to the plate (6),

- a fourth portion (24) of hemispherical shape secured to the second end
 20 (7) of the lug (2), this fourth hemispherical portion (24) being complementary to the third hemispherical portion (23), and

- fastener means (25) for fastening together the third and fourth hemispherical portions (23, 24) when they cooperate one in the other with a
 25 common second center of curvature (26).

2. A system according to claim 1, characterized by the fact that the fastener means (13, 25) comprise a fastening screw (30) made up of a threaded shank (31) and a screwing head (32), and means for assembling said fastening screw (30) in cooperation with the two hemispherical portions (11-12, 23-24) so as to
 30 sandwich one of the two portions between the other portion and the screwing head (32).

3. A system according to claim 2, characterized by the fact that the means for assembling said fastening screw (30) in cooperation with the two hemispherical portions for sandwiching one of the two portions between the other portion and the screwing head, are constituted by the fact that the threaded shank (31) is secured to the hemispherical portion sandwiching the other hemispherical portion and goes through it via a hole (40) of section greater than that of the said threaded shank (31), the screwing head (32) being screwed onto said threaded shank (31), the two faces (41, 42) of the screwing head (32) and of the hemispherical portion that come into contact with each other being of complementary hemispherical shapes and with centers of curvature that coincide substantially with the centers of curvature (14,26) of the hemispherical portions cooperating one in the other.

4. A system according to claim 3, characterized by the fact that the first and second hemispherical portions (11, 12) being respectively convex and concave, the two faces (41, 42) of the screwing head (42) and of the hemispherical portion that come into contact with each other are respectively concave and convex.

5. A system according to claim 2, characterized by the fact that the means for assembling said fastening screw (30) in cooperation with the two hemispherical portions for sandwiching one of the two portions between the other portion and the screwing head (32) are constituted by the fact that the threaded shank (31) is screwed into the hemispherical portion sandwiching the other portion and goes through the other portion via a hole (40) of section greater than that of the said threaded shank (31), the screwing head (32) being secured to the threaded shank (31), the two faces (41, 42) of the screwing head (32) and of the hemispherical portion that come into contact with each other being of complementary hemispherical shapes and with centers of curvature that coincide substantially with the centers of curvature (14, 26) of the hemispherical portions cooperating one in the other.

6. A system according to claim 5, characterized by the fact that the third and fourth hemispherical portions (23, 24) being respectively convex and concave, the

two faces (42, 42) of the screwing head (32) and of the portion of hemispherical shape that come into contact with each other are respectively convex and concave.